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ABSTRACT

This paper focuses on a program at Marist Sisters' College, Woolwich (MSCW), an Australian secondary school, that integrates information skills into subject curriculums. A description of the school which includes its philosophy and ethnic makeup is presented to give a context for the program. The research project investigated the impact of information skills on learning and teaching. An interdisciplinary planning team was established to help teachers develop information skills in the classroom. The team found that there were four levels of commitment in regard to the program: resistance, curiosity, acceptance, and commitment. The team implemented two strategies to help teachers progress through the stages: a demonstration program was set up so that teachers could observe the process; and teachers were involved in negotiating lesson planning. Both qualitative and quantitative data were gathered to evaluate the program. Both teachers and students found the addition of information skills to the curriculum to be beneficial. These skills had an impact on students' self perception, learning processes, learning outcomes, and on the learning environments. The paper concludes by discussing the role of school administrators in integrating information skills into the curriculum. (Contains 10 references.) (JLB)

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The Challenge of Information Literacy : a Catholic secondary school's response

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INTRODUCTION

Our presentation today focuses on an innovative program at Marist Sisters' College, Woolwich (Australia) which integrates information skills into subject curriculums. We will discuss the particular school context for the program, and some research findings from the school which indicate that information skills enhance student learning and personal and social growth, and contribute to the wholeness of each student. We will also discuss the pivotal role of the school administrators in this particular aspect of curriculum development.

Seven hundred and fifty girls in high school coming from forty-one different ethnic backgrounds; a curriculum that offers worthwhile and extensive choices; a history of fine passes in the externally-set final examination that the senior class sits; a special education programme that caters for the range from mildly-intellectually impaired through to the gifted.

These are but a few of the realities of Marist Sisters' College, Woolwich, where I am Assistant Principal. My colleague, Mr Ross Todd, lecturer in the School of Information Studies at the University of Technology, Sydney, has worked closely with the College in the area of Information Literacy, which embraces both Information Skilling and Information Technology. It is obvious from the introduction that this school offers a diversity, and it has been the challenge of the administration to establish in that diversity, a unity that will allow for effective learning and for effective teaching.

But first, what is this school?

PART ONE

1. MSCW

Marist Sisters' College, Woolwich, is nestled in the northern reaches of a little peninsula that has on either side of it the two major rivers that flow into Sydney Harbour. From many positions on campus one can view Sydney Harbour and all that goes with it - the city skyline, the Opera House and the Harbour Bridge.

Eighty-six years ago the Marist Sisters, a French order of religious women, established the College. The clientele was a small group of eleven from rather privileged backgrounds. The school grew and became a private boarding school of high renown. After Vatican 11, along with other groups within the Catholic Church, the Marist Sisters reassessed their ministry in the light of the charism of their Foundress. As a result of this, in 1974 the school became a regional one, operating under the auspices of the Catholic Education Office, and it continues in this mode today : it is a **Marist systemic** school in **NSW**.

Each of these three elements - Marist, systemic, and NSW - impact on its existence, and quick clarification of each will be useful.

Marist pedagogy is essentially personal, and is directed towards the good of each individual. It is child- centred, and is based on a deep concern for each of the students , not in isolation but in the total context of their growth to maturity, providing as far as possible the best conditions for their self affirmation within an environment characterised by a family and the spirit of Mary. By giving life to her son, Mary associated herself with Christ's mission which is continued by the church. Because we are committed to Christ, with Mary we carry on this mission in our own times. Education that is part of that mission and has as its base that collaboration with God in the re-creation of the minds and hearts of the young. The 'challenge' mentioned before includes accommodating the diversity that exists in the backgrounds, experiences and capabilities of the girls.

As well as being Marist, MSCW is **systemic.** In its vision statement, the Sydney Archdiocesan Catholic Schools Board makes four assumptions: that the authentic Catholic School is founded on the person of Jesus Christ and is enlivened by gospel values; that it highlights the relevance of our faith to life and contemporary culture; that, embedded within the community of believers, it shares in the evangelising mission of the Church; and that it is committed to the development of the whole person.

The congruence between these first two characteristics of MSCW - its Marist and its Catholic nature - is obvious, and indeed to be expected. But, MSCW does not operate on a Catholic island - it is a school in **NSW.**

Over recent times education in NSW has undergone some marked changes. As a result of the Education Reform Act of 1990 , N.S.W post-compulsory education underwent several important changes:

> State schools were dezoned, and this has increased the choice parents have - between non-State schools, and a variety of State schools, not just the one in their area. This variety has been enhanced by an increase in the number of selective, specialised and technological high schools.

2. DIVERSITY IN THE SCHOOL

Marist Sisters' College - this Marist, Catholic, systemic school operating in the State of New South Wales - is non-selective, and to cater for the range of the girls on roll is one of the principal challenges facing the administration and the staff. Whether or not to stream classes is a decision left to faculties and their co-ordinators, and currently non-streaming is the norm, although some classes, such as Science, are streamed. Co-incidental streaming can happen as a result of courses perceived as having varying degrees of difficulty being offered within subject areas. Of course, quite a few girls chosing not to do courses that most closely match their apparent ability, can counteract this.

Members of the teaching staff bring to the College a richness bred from diversity. Most are Catholic, and the readiness of those who are not to support the Catholic ethos is ascertained prior to employment, and is assumed in the planning of daily operations. Each year there is a small turnover of staff, and the administration strives to balance experienced and beginning teachers. This year - our school year starts in the new year - we employed three beginning teachers.

There is a richness of diversity in the student population. First, the municipal areas from which the girls come have attracted migrant families, and this is reflected in the ethnic composition of the student population. Currently there are forty-one countries of birth other than Australia, the most common being Italy, Hong Kong, Korea, China, the Philippines, New Zealand, South Africa and Lebanon. There are forty-five languages other than English that are spoken in the students' homes, the most common being Lebanese, Italian, Korean, Armenian, Cantonese and Mandarin. Not surprisingly the vast majority of the girls are Roman Catholic, Maronite Catholic or Armenian Catholic.

When the girls enter at Year Seven, the College knows very little about their academic ability. Most of the information we have is gleaned from assessment reports issued by the various primary schools. However, there is no planned similarity of structure in these documents, and the best that a reading of them gives, is a general picture. This is not a problem, however, because of the non-streaming mentioned before. For Year Eight the girls are streamed in Mathematics and Science, and this is achieved by their performance in a series of across-the-Year tests. The streaming in these two areas continues - with a considerable degree of mobility - until the end of Year 10, after which the girls choose the levels at which they want to study.

While each of the teachers has his or her own teaching style, **each has been encouraged over the last couple of years to accommodate in this the principles of information literacy.**

Information literacy is defined as the ability to use information purposefully and effectively. The American Library Association Presidential Committee Report suggests that to be information literate, a person must *"be able to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information. Ultimately information literate people are those who have learned how to learn. They know how to learn because they know how information is organised, how to find information, and how to use information in such a way that others can learn form them. They are people prepared for lifelong learning, because they can always find the information needed for any task or decision at hand."* Information literacy is presented as an holistic, interactive learning process encompassing the skills of defining, locating, selecting, organising, presenting and evaluating information from sources including books and other media, experiences and people, being able to consider it in the light of current knowledge, adding it to a store of knowledge, and applying this knowledge capably and confidently to solve information needs. In essence, information literacy is demonstrated when competence with the range of information skills is demonstrated.

Information literacy is increasingly being presented as a key challenge to educators because of the changing educational context of an emerging global information society and the growing and undesirable disparity between the "information rich" and "information poor".

3 NATURE OF THE INFORMATION SOCIETY

Most people would agree that our society today is an information society, and by the time our students are its leaders it will be even more so.

> *By the year 2000 today's children will be completing tertiary education and be part of a very different twenty-first century workforce. They will be entering an information age that will require them to analyse and interpret information, to present it to others in various forms, and to form opinions and to make judgements and decisions from a variety of sources. A new set of basic learning skills will be needed to equip them to live in this changing world. Creativity and innovation must be allowed to flourish...* (Vogler, 1990 : 101)

In 1990 Jones highlighted that it is recognised that in Australia more people are employed in creating, collecting, storing, processing and disseminating information than in producing food, fibres, minerals and manufacturing products. (Jones, 1990)

> *Were Australia still a farming society then it would be necessary for the young to be educated to take their part in that society - maybe on the farm, maybe tending sick animals, maybe arranging and running transportation of produce to sell at market, and the list goes on. In any case, successful members would have to be au fait with - no, more than that. They would have to be competent users of the commodity of power and progress of their time, and they would have to be competent users of the associated technology. I would argue that the greatest task facing Australia is recognising that the most important commodity in the twenty-first century will be knowledge, and the most important capability will be that of accessing, creating and using knowledge. Having and using knowledge will determine how well nations adapt, survive and prosper in a global environment characterised by accelerating change and increasing uncertainty - economically, environmentally, socially .*
>
> (S. Crean : 1991, p 23)

The Information Society is here, and on that there is no debate. The speed at which this has happened is quite extraordinary. It took 229 years for the Newcomen engine in 1708 to the emergence of the jet plane in 1937. It has taken only 36 years

from the development of the first generation computer by Eckert and Mauchly in 1946, to the fifth generation computers of the 1990's that mirror the neural communications ability of the human brain. The information revolution has occurred some 6.5 times faster than the power revolution. And there are signs that the information intensity of our commercial and social environments is increasing. (Masuda, 1981 : 42-45)

The reality for schools is that the Information Society with its associated technology puts demands on education. Certainly since formal education began, the technology of the society has been part of it, although there is a big difference between the stone tablet, the stylus, the slate, and might I say the printed book, and the facilities whereby our students can reach information beyond the walls of their libraries, and can not only communicate with but can educate - and be educated by - students in the global classroom. The administration of MSCW believes that to ignore this would be to betray its mandate, because it would deny the students the means of developing as full members of their world.

Very much part of school administration's responsibility not only is to have a vision, but also to see that this is implemented. Obviously, integrating Information Skills in the curriculum is very much part of this vision. First, **teaching styles** needed reviewing. Then, the **development and integration of information skills** across the curriculum had to be addressed. Thirdly, **in resource allocation**, information technology deserved consideration. Following on from this, **staff inservice** became a need. And above and beyond all of this, the spirit, the nature, the ethos of the school had to be preserved. These five areas encapsulate our College's way of accepting the challenge of providing and promoting effective learning and effective teaching in this Information Society.

To achieve these five goals at MSCW, the administration supported the teacher-librarian in looking towards a research project that would investigate the impact of Information Skills on learning and on teaching, and to setting up mechanisms to facilitate the integration of Information Skills into the curriculum in this Marist Catholic school in NSW that has a diversity of clientele.

PART TWO

1. MECHANISMS

Of critical relevance in this Information Society is that learning be seen as student-oriented. Those of us who have seen more than a few Easters might be tempted to say that we always did. But nowadays there is a much greater need? ... demand? ... or whatever, that the oft quoted ' sage on the stage ' most certainly, most overtly become the 'guide on the side'.

Consider these three points, set down by Legg as new paradigms for learning and teaching , encapsulating as they do the demands that the Information Society puts on education.

> *We must first make instruction interactive,participative, experimental, and visual- in short, enjoyable.*
>
> *We must teach students how to gather and process information - we must put the student in control.*
>
> *We must enable just in time rather than just in case education and accept that learning is a lifelong responsibility, not just something you do at school or at university.* (Legg, 1993 : 91-92)

It is fairly well accepted that few things cause blood pressure to rise quite so quickly as does change. Couple this with the notion that the classroom is some sort of kingdom, and you highlight one of the challenges that administrators face in getting teachers to look at their teaching styles.

At MSCW there is quite a diversity on the staff. Teaching experience ranges from first- year out to thirty-plus years; the tenure at the College ranges from one to twenty-two years; and the preservice training includes trade experience, or tertiary education at either training colleges or universities, which were conducted either by the government or by the church.

Over the last nine years at least, subject departments - faculties - have been encouraged to be alert to changes and innovations that occur in their subject areas. The central office for our system of schools - the Catholic Education Office (CEO) -

organises cluster meetings for studies co-ordinators. From these meetings they bring back to their people ideas to discuss, analyse and perhaps implement.

The development of Information Skills became mandatory in state schools and optional in the likes of ours in 1988. It had an unfortunate birth in NSW, because its documentation hit schools as a library document. I don't know the reality of school politics in this country, but for us it easily could have become the responsibility of the school library to foster its development and growth.

One of the reasons that this likelihood did not come to fruition at Woolwich was that mechanisms were set up which allowed for the whole school to be involved. It was obvious to the teacher-librarian that developing and integrating information skills into the curriculum was the ideal to which all educators should aspire. Such a change would not happen automatically, and given its importance, it was to be owned by the staff, rather than imposed upon them. A belief in the inherent benefits of Co-Operative Programme Planning and Teaching (CPPT) resulted in this being employed as the facilitating factor. The overall process was documented as a research project facilitated by UTS.

An earlier report on research into this part of the school's progress was presented at the annual conference of the International Association of School Librarianship in Belfast is 1992.

The overall process in establishing a commitment to Information Literacy had as its framework **Havelock's model of change and educational innovation.** (Havelock, 1973 : 115)It went through five stages.

First, an interdisciplinary planning team was established. By having teachers who had some expertise in the implementing of Information Skills in their classes, working with the teacher-librarian, it meant that the process was being owned beyond the walls of the library. This team was directed by the teacher-librarian, and had Mr. Todd as the outside facilitator. **Secondly,** this planning team, with the full support of the administration, made a commitment to meet weekly, at a fixed time. **Thirdly,** the team looked at the school community, and identified as one of its strengths, that it was receptive to new ideas. Coupled with the Principal's open support, the team was emboldened to move forward.

Fourthly, the team consulted with teachers, and identified the barriers that the teachers saw as problems in terms of developing Information Skills in the classroom.

In doing this, the team found that there were **four levels of commitment**. Teachers at the level of **resistance** generally saw Information Skills facilitated by team-work with the teacher-librarian as threatening, and time-consuming. Teachers at the **curiosity** level acknowledged the worth of Information Skilling, but were not prepared to commit themselves to it, and they were somewhat uncomfortable about having another staff member in the classroom . At the **acceptance** level teachers had engaged in co-operative planning and teaching of Information Skills, and they shared their successes with their colleagues, but they still were concerned about covering content in a certain time limit. And, at the **commitment** level - well, the title is self-explanatory.

The **fifth** phase had the team implement two important strategies to help individual teachers progress through the stages: First, setting up an almost demonstration programme which other members of the staff could observe, analyse and discuss. This happened in the junior Science programme for a ten weeks unit during which time the teacher and the teacher librarian engaged in a co-operative program of developing information skills; and secondly, getting teachers and the teacher-librarian to negotiate in lesson planning to ensure that Information Skills are developed and integrated.

2 THE RESEARCH PROGRAMME

With the beginnings of a climate that was conducive to the development of students' Information Skills, the team decided to address an issue that was part of their commitment, and which would answer the question put by the sceptics : How do you know all this works? Is this any better than the way I have been teaching all along? Do Information Skills enhance student learning?

As was mentioned before, recent curriculum changes in NSW presuppose the student-centred learning , and the developing of information skills. This married well with the a curiosity to investigate in a structured way the fairly unexplored notion of the impact of Information Skills on learning, and *ipso facto* on teaching.

The **first stage** of the research was quite deliberately qualitative in nature. For the research team this was essential, because this was a pilot research project in the field to identify aspects for quantitative analysis. For the Administration, the qualitative nature of the research was desirable because it would address pastoral issues that were integral to the school's existence.

The participating students were some one hundred and ten in classes from Year 7 to Year 11. All of these had experienced at least four months of integrated Information Skilling in their courses, planning and teaching co-operatively with the teacher-librarian. They were observed in the classroom setting, and data was collected from lengthy observations of them, loosely-structured interviews, written course evaluations, assignments, attitude surveys and test scores. Observations occurred over a six month period, and interviews were held in the last two weeks of that time. In addition eight teachers who displayed a range of Information Skills experience were interviewed. There were all but no research findings from elsewhere against which the school's findings could be analysed. Rather than seeking evidence to support existing hypotheses, the team analysts built up abstractions, ones that enabled the results to be organised into focus categories. (Todd, Lamb and McNicholas, 1992 : 26 - 30)

The results of the first phase of the research were most encouraging. In terms of the impact of Information Skills on teaching, the **teachers** indicated that a valuable result of using the process in fact counteracted one of the most strongly-held barriers against it : they found that in terms of time, the process provided a saving. Classroom management was more easily responsive to the needs of the students, and there was an added vitality to teaching, enabling them confidently to hand over to the students the responsibility for learning. 'Getting through the content of the courses' had been put forward as a reason for not moving from the tried-and-true methods. The process in fact enabled them to sequence the content, and present it in a way that was more efficient and effective. Assessment became a much more useful component of learning. The process also was shown to facilitate a higher enjoyment level in their teaching.

The **students' results** were equally as exciting. First of all, Information Skills were seen to impact on their **self-perception.** They experienced an enhanced self-esteem as they developed effective questioning and responding skills, reflected on their place in their own learning, developed independence and self-reliance, and enjoyed positive attitudes to courses.

The process was seen to impact on their **learning process.** They said that it now took less time for them to learn; that they saw value in mapping-out what they already knew and that this gave them direction for further research; that learning now was a challenge; that they had a responsibility for their own learning; that they could identify steps in the learning process that they needed to refine; and that now they were not daunted by the information available because they knew how to handle it.

As far as **learning outcomes** were concerned, learning had become meaningful; reflective memory, and memory skills improved; concentration was made easier; autonomous learning was developed; transfer of learning was occurring; test results improved; and ideas could be shared, challenged and refined with confidence.

Not surprisingly, there were perceived impacts on the **learning environment**. Respect for thought, for others, and for opinions different from one's own developed, as did a willingness to work collaboratively with their teacher and their peers. Interest levels rose. Two hints for teachers were part of the findings, specifically that learning is easier when the teacher is aware of the capabilities of the students; and that teachers should frame questions in such a way that they can be answered.

The **second stage** of the research, undertaken in 1993, was quantitative in nature. In a more formal and systematic way, the research sought answers to these questions:

(a) Is there a difference between a conventional content-approach and an integrated content-information skills approach to Year 7 science education in terms of level of:

- mastery of science content and science skills?
- information handling skills?

(b) Is there an interaction between level of ability of students and the type of approach?

(c) Is there any impact of the integrated content-integrated information skills approach on attitudes to schooling, such as motivation for and attitudes to learning, academic self-concept, self-esteem, and sense of control over learning performance?

A comparison group experimental design was set up in the school, under the careful direction of the the school administration to ensure there was no breech of any ethical considerations. A **Control group** consisting of two Year 7 Science classes received science instruction according to the aims and objectives of the Science Syllabus using teaching-learning strategies that did not involve any formal attempt to integrate information skills into the content. Teachers assigned to these classes had not been involved in the development or teaching of curriculum programs involving co-operative program planning and teaching with the school library media specialist with particular emphasis on the development of information skills.

A **Treatment group** consisting of another two Year 7 Science classes received science instruction according to the aims and objectives of the Science Syllabus using teaching-learning strategies that include information instruction in information skills according to the steps and skills of the information process. Formal instruction in information skills was integrated into subject content and facilitated by co-operative teaching by the science teacher with expertise in information skilling, and the school's teacher -librarian. This instruction took place over three terms, commencing midway through term one and ending mid term four. A standardised academic ability test showed no significant differences academically between each group.

Differences were measured in terms of the students' mastery of science content and skills; their competence with using information skills strategies, and in terms of a range of attitudes about schooling.

The quantitative findings clearly support the earlier qualitative findings.

Statistically significant differences have been reported between the two groups in relation to the end-of-year science scores: the treatment group undertaking the information skills program have a mean score of 71% compared to a mean score of 62.6% for the control group. Information skills instruction has made a significant improvement in the level of students' mastery of science content.

Statistically significant differences were also reported between the two groups in terms of their use of information skills strategies in their science problem solving activities. On an Information Skills measure developed by the research team, students in the treatment group demonstrated the use of a greater range of

information skills than the control group to solve information problems. The analysis has also shown that the largest increases in problem solving strategies have taken place with average and below average students.

Students were also compared in terms of their attitudes and perceptions of school life, motivation for schooling, feelings about school performance and confidence in their academic ability, their sense of instructional mastery, and satisfaction with school. Two standardised tests were used. While there were no statistically different findings between the groups in these categories, the scores for the treatment group were higher than the control groups - on a range of measures including satisfaction and motivation for schooling; their sense of achievement and instructional mastery; their valuing of learning opportunities made available to them; and their overall outlook on life. Given that these attitudes tests were general in nature, this result is not surprising, and indeed, is interpreted with considerable caution, recognising a range of variables at play not controlled in the study.

At this point in time, it is difficult to make generalisations beyond their immediate research environment. However, for Marist Sisters' College, there is some evidence to suggest that an integrated information skills program does have a positive impact on students' academic mastery, and on their attitudes to school life, and on their self-esteem, and their own confidence to take charge of their learning.

PART THREE

THE CHALLENGE FOR ADMINISTRATION

For the administration of MSCW, the challenge is to accommodate the diversity in the school, and to lead it into the millennium in a way that enables the students to be educated for their world - and, as has been posited today, this involves integrating Information Skills into the curriculum.

The Federal Department of Education and Training in Australia (DEET) funded a National Project - Leadership and Management Training for Principals - as a response to the concern many educational leaders do not have adequate training to cope with the many new changes facing them.

A report on this expressed the Principal's task as being *'.. to ensure that the school caters for ALL students, noting changing values* [accommodating **'diversity'**] *working in collaboration* [accommodating **'ownership of change'**], *and*

understanding trends accommodating 'integrating **Information Skilling in the curriculum**']

Many people interested in our Information Skills project - educators visiting the school, teacher-librarians and other administrators looking to doing similar integration of Information Skills - have asked the Administration what the chief concerns have been. The answer is **teacher involvement** and **finance.**

A teacher's life involving as it does the daily taking of classes, preparing lessons, contacting parents, counselling students, marking papers, and so on, may not lend itself to the immediate enthusiastic embracing of new trends. And yet, the demands of the curriculum changes that incorporate the demands of the information society in which we live presuppose a capacity to change teaching styles. At MSCW this has been interpreted as the integration that has been the subject of this paper.

Ablong 's comments are worth noting here :

> *... all thinking, from daydreaming to creativity, needs the same things to have a successful outcome:*
>
> *data, information and/or some form of evidence to act as 'confirmatory bias' to support, disconfirm or falsify the issue in question;*
>
> *to evolve satisfactory solutions, or to discover that there are no satisfactory solutions to the problem at hand;*
>
> *to provide or reinforce the human memory systems with up-to-date knowledge to allow creativity to occur;*
>
> *to make decisions under conditions of uncertainty where critical information may be probabilistic, and there is no one single answer - only the 'best bet.'*(Ablong, 1993 : 98)

These four requirements summarize the demands placed on the administration at MSCW, in working to achieve its aim of providing an education which will enable the students to grow in their world - their Information Society.

If embracing the challenges involved in having the school Information Literate falls somewhere along the 'day dreaming - creativity' continuum - as it most certainly does - the Administration needs to have an **informed vision**, one that can see the need for the integration, one that is *au fait* not only with the education documents, but with the research and reflective literature as well. In doing all of this, the ethos of the school must be kept sacrosanct. In fact, at a school such as MSCW, this very fact provides the counter-argument to sceptics who might see the whole thing as something to be guarded against, less the 'traditional' base of education at the school be threatened.

Part of this vision at MSCW is focussing on the Virtual Library, and accepting the **resourcing implications** that this has. In leading the school towards Information Literacy, consideration has had to be given to resourcing implications.

The obvious starting point is the setting of the school budget. Information technology does not come cheaply, but in the society at present it is a necessity in terms of becoming Information Literate. The federal government made available funding for technology in schools, and the school was successful in its application. This quickened its ability to establish a networked facility that enables students and staff to access information from the school's networked CD-ROMs and fifty seven computer terminals; to become adept at word processing; and to tap into a national data base via modems.

Technology is as good as the human factor involved in its operation, and to facilitate the developing of Information Literacy, the administration set aside **Staff Development** time for the entire staff - teaching and ancillary - to refine/develop skills required for Information Literacy. An encouraging outcome of this was the markedly increased use of the technology in both their personal school work, and in the classroom. Mention was made earlier of the range of intellectual abilities. The integration of Information Skills into the curriculum is not only for top classes, or mainstream classes. Indeed, it is for the range of classes. Special Education classes that cater for the mildly intellectually impaired students, extension units that target the Gifted and Talented, as well as regular classes are being schooled in the process.

Being a systemic school, MSCW's staffing allocation is determined by the central office, and this generally does not allow for Information Literacy personnel as such. However, with Administration's sensitivity to the cause, other opportunities

present themselves. For example, this year's Staff Development time is being devoted to Co-Operative Learning and Teaching. The objectives of this particular process, sit very neatly with the 'define-locate-select-organise-present-evaluate' objectives of Information Skilling. As Dalton reflects in the introduction to the Australian edition of Blueprints, ...[the key messages of Fogarty and Bellanca] ...

focus on ways to help students ***learn*** *to work effectively in small teams. Thinking skills and problem-solving processes are developed as team members learn to listen, to value each person's unique contribution, take another person's point of view, engage in a variety of team roles and tasks, resolve conflicts and achieve consensus. As students work together, discuss their understandings, have their thinking challenged and thinking skills made explicit, they enlarge their repertoire of strategies and are challenged to reflect and evaluate in ways that help them transfer what they learn well beyond classroom walls into life situations.* (1991)

Again, federal government funding has been made available - this time for professional development of staff - and the school has made application under the scheme. If the application is successful, then the inservicing will be intensive; if not, it will be done within the usual Staff Development time made available by the CEO.

As has been mentioned, the original document - the one that hit the schools long before the recent curriculum documents - arrived in the school library, and in many schools that is where it just might have stayed, had it not been for the commitment of the teacher-librarian, and the capacity of the Administration **to empower**. In practical terms, this involved first of all a willingness to learn, and a preparedness to support the teacher-librarian in the various stages that were mentioned earlier. As well as this, mechanisms have been established by which the school staff can have the opportunity to make informed choices. For example, at the timetabled meetings of the Studies Co-Ordinators - the faculty heads - the co-relation between the new curriculum documents that they have to accommodate in updating programmes, and Information Skills *per se* are highlighted.

The school strives to provide opportunities for the diverse student body to develop as individuals who will be take their place, who will provide leadership in their world, a world vastly different from the one in which most of their teachers grew up.

The interpretation of this goal at MSCW is an exciting one, and indeed an ambitious one. To achieve the goal, it requires leadership that *provides vision; that develops a common purpose through the consultative process; that facilitates ... goals; that provides entrepreneurship; that supports the school as a lively educational place; that works creatively with, and empowers others; that ensures the process and content of curriculum is contemporary and relevant.* These characteristics as outlined by DEET underscore what is needed to empower a school to adopt a programme such as the one that is happening at MSCW. In essence, what is happening is that there has been an acceptance of the challenge that is involved in creating unity in diversity.

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